



**NIFA Veterinary Medicine  
Loan Repayment Program (VMLRP)**

National Institute of Food and Agriculture  
US Department of Agriculture  
OMB Information Collection  
Approval No.: 0524-0046

# Veterinarian Shortage Situation Nomination Form

To be completed by the State or Insular Area Animal Health Official

## Veterinary Medicine Loan Repayment Program (VMLRP)

### Nomination of Veterinarian Shortage Situations for the Veterinary Medicine Loan Repayment Program (VMLRP) Authorized Under the National Veterinary Medical Service Act (NVMSA)

**Note: Please submit one separate nomination form for each position. See solicitation for number of nominations permitted for your state or insular area.**

#### Location of Veterinary Shortage Area for this Nomination

Note: If this nomination is for a public practice position, please provide the location of the home office or the center of service area.

Location of Veterinary Shortage: Utah  
(e.g., County, State/Insular Area)

Center of Service Area or  
Location of Position: State Veterinary Diagnostic Laboratory, 950 East 1400 North, Logan, Utah 84341-2877  
(e.g., Address or Cross Street, Town/City, and Zip Code)

#### Type of Veterinary Practice Area/Discipline/Specialty

☐ Type I Shortage: Private Practice  
Food Animal Medicine (at least 80 percent time)  
Please select **one or more** specialties requested for this position:

- ☐ Beef Cattle
- ☐ Dairy Cattle
- ☐ Swine
- ☐ Poultry
- ☐ Small Ruminant
- ☐ Other : \_\_\_\_\_

☐ Type II Shortage: Private Practice – Rural Area  
Food Animal Medicine (at least 30 percent time)  
Please select **one or more** specialties requested for this position:

- ☐ Beef Cattle
- ☐ Dairy Cattle
- ☐ Swine
- ☐ Poultry
- ☐ Small Ruminant
- ☐ Other : \_\_\_\_\_

☒ Type III Shortage: Public Practice (at least 49 percent time\*)  
Employer: Utah Veterinary Diag. Lab. Position Title: Veterinary Laboratory Diagnostician  
Please select **one or more** specialty/disciplinary areas.

- ☐ Food Safety
- ☐ Public Health
- ☐ Epidemiology
- ☒ Other: Veterinary Laboratory Diagnostician

**Please describe the objectives of a veterinarian meeting this shortage situation as well as being located in the community, area, state/insular area, or position requested above (limit your response to 200 words or less).**

The objective is to provide enhanced laboratory-based veterinary diagnostic services to citizens in the Intermountain region, a multistate area that largely lacks access to veterinarians trained to provide such services. As an example, in the state of Utah there are eight veterinary pathologists, but only two offer postmortem diagnostic services out of an animal health laboratory. The significance of this shortage was emphasized recently: 'Many emerging diseases in animals are initially recognized by diagnostic pathologists in animal health laboratories using routine laboratory submissions...Familiar recent examples are chronic wasting disease, bovine spongiform encephalopathy, West Nile encephalomyelitis in North America, and post weaning multisystemic wasting syndrome in pigs.<sup>1</sup> Detection of each of these diseases required veterinarians trained in laboratory-based diagnostic medicine. Unfortunately, numbers of veterinarians with such specialty training are few; most graduates enter private industry because of high educational debt combined with better salaries. Hence, the objective here is to make diagnostic medicine more attractive by enabling payment of student loans for those that commit to this path, and consequently expand veterinary diagnostic services to the citizenry in the intermountain region.

<sup>1</sup>D. O'Toole; Monitoring and Investigating Natural Disease by Veterinary Pathologists in Diagnostic Laboratories; *Veterinary Pathology*, 47 (1):40-43, January 2010.

**Please describe the activities of a veterinarian meeting this shortage situation and being located in the community, area, state/insular area, or position requested above (limit your response to 200 words or less).**

Veterinarians trained in laboratory-based medicine are specialists in anatomic pathology, bacteriology, clinical pathology, epidemiology, molecular-based diagnostics, serology, toxicology and virology. These individuals identify disease processes, order and oversee the performance of laboratory-based tests and procedures, validate and implement new diagnostic assays, track regional disease trends, and identify new or re-emerging pathogens. In addition, veterinary laboratory-based diagnosticians work with basic research scientists when new or novel agents are detected. From the same article quoted above: 'In human medicine...it is rare for an important emerging human disease to be identified and worked out by a single laboratory and rare indeed for that to be a state-based public health laboratory. This is not the case on the animal side. With the exception of reportable diseases and their mimics...the recognition of emerging diseases in animals in the United States rests largely on the initiative, curiosity, and creativity of veterinary...diagnosticians. Often these are pathologists based in state-funded diagnostic laboratories'.<sup>1</sup> As mentioned above; there is an overall shortage of such veterinarians.

**Please describe any past efforts to recruit and retain a veterinarian in the shortage situation identified above (limit your response to 100 words or less).**

In the past several years, the publically funded animal health laboratory in Utah attempted to recruit a board certified or eligible veterinary pathologist for more than a year, but a suitable candidate was not identified and the attempt was abandoned. A similar attempt to recruit a diagnostic bacteriologist failed as well. In the Intermountain areas, shortages are particularly acute in anatomic and clinical pathology, diagnostic bacteriology and diagnostic molecular biology.

**Please describe the risk of this veterinarian position not being secured or retained. Include the risk(s) to the production of a safe and wholesome food supply and to animal, human, and environmental health not only in the community but in the region, state/insular area, nation, and/or international community (limit your response to 250 words or less).**

Other geographical regions besides the Intermountain west are experiencing difficulties in recruitment of veterinarians trained in laboratory-based medicine. As an example, in a recent survey of organizations that employ veterinary pathologist, 67 of 122 respondents (55%), 'reported a total of 116 open anatomic pathologist positions, with each organization having an average of 1.73 open positions. The number of open positions ranged from one to eight'.<sup>2</sup> Worse, nearly '80% (95 of 121) of respondents to the question regarding open anatomic pathology positions indicated they had open positions in the last two years'.<sup>2</sup> Hence, chances of a successful recruitment of specialty-trained veterinary diagnosticians are low at best. The consequence is that veterinary diagnostic laboratories are understaffed, and personnel within these laboratories are at risk of leaving. This compromises disease monitoring and investigation, which permits serious endemic, or even worse, foreign animal diseases, to go non- or under-diagnosed. Consider that recent losses to the British economy due to foot and mouth disease are estimated at \$48 billion.<sup>3</sup> Since delay of even just a few days in establishing a correct diagnosis can result in a foreign animal disease becoming established, rural areas serviced by inadequately staffed animal health laboratories place the entire nation's animal agriculture production at risk.

<sup>2</sup>Veterinary Pathologist Employer Demographic Survey: Final Report, pg 2; <http://www.acvp.org/career/EmployerSurvey.pdf>

<sup>3</sup>Gewin, V. 2003. Agriculture shock. *Nature* 421:106-108.

**Please indicate whether you consider this situation/position a candidate for a "service in emergency" agreement (limit your response to 100 words or less). Please see solicitations for additional information regarding the obligation of participants who enter into the "Service in Emergency" agreement. [LEAVE BLANK – NOT FOR IMPLEMENTATION IN 2010]**

Authorized State or Insular Area Animal Health Official or designee:

Name: Bruce L. King, DVM  
Title: State Veterinarian  
Organization: Utah Department of Agriculture and Food  
Email: bking@utah.gov  
Telephone Number: (801) 538-7162  
(Area code required)

Bruce L. King

Type Name

February 23, 2010

Date

Public reporting for OMB control number 0524-0046 is estimated to average two hours, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information, unless it displays a current valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to NIFA, OEP, 800 9<sup>th</sup> St. SW, Washington, DC 20024, Attention Policy Section. Do not return the completed form to this address.